

Applicant No.: 10/766,520
Art Unit: 3745
Response to Office Actions
mailed October 25, 2005 and
February 9, 2006
Attorney Docket No.: 26218

REMARKS

This is in response to the Final Office Action mailed October 25, 2005 and the Advisory Office Action mailed February 9, 2006 in connection with the above identified patent application. Prior to entry of this amendment, original claims 1 - 4 were pending in the application.

By this amendment, claims 1 - 3 have been cancelled, new independent claim 8 and dependent claims 9 and 10 have been added, and claim 4 has been amended.

In particular, it is to be noted that no new matter has been introduced in amending the set of claims, since the amended set of claims contains only limitations that were disclosed in the original specification.

In particular, new claim 8 is supported by what disclosed in original claims 1 - 3 and 5 - 7. Further, support for new claims 8 - 10 can be found for example, on page 3, paragraphs [17] - [20] and in Figure 2.

Claim 4 has been amended for consistency with new independent claim 8.

It is respectfully submitted that the above amendments introduce no new matter within the meaning of 35 U.S.C. § 132.

Claim Rejection - 35 U.S.C. § 112

According to 35 U.S.C. § 112, the specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Applicant No.: 10/766,520
Art Unit: 3745
Response to Office Actions
mailed October 25, 2005 and
February 9, 2006
Attorney Docket No.: 26218

Applicant respectfully traverses the Examiner's rejection because the claims as amended, now comply with 35 U.S.C. § 112.

Since the Applicant has canceled claims 1 - 3, the rejection to previously amended claims 1 - 4 under 35 U.S.C. § 112 is now moot.

Accordingly Applicant respectfully request the Examiner to withdraw the rejection under 35 U.S.C. § 112.

Claim Rejection - 35 U.S.C. § 102

Claims 1 to 4 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Boeckel (US Patent No. 3,303,995); and claims 1 and 2 have been rejected under 35 U.S.C. § 102(b) as being anticipated by French (UK Patent No. 1,414,891).

For a reference to anticipate an invention, all of the elements of that invention must be present in the reference. The test for anticipation under section 102 is whether each and every element as set forth in the claim is found, either expressly or inherently, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987); MPEP §2131. The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989); MPEP §2131.

Claims 1 - 3 have been canceled, claim 4 now depends from new independent claim 8, and new claims 9 and 10 depend from claim 8. Applicant respectfully traverses the Examiner's rejection because all of the

Applicant No.: 10/766,520
Art Unit: 3745
Response to Office Actions
mailed October 25, 2005 and
February 9, 2006
Attorney Docket No.: 26218

elements of new independent claim 8 of the present invention are not present in the cited prior art.

The feature of the present invention is the windows 25 formed in annular wall 13, close to the peripheral edges of the base wall and the annular wall, each placed in the gap between two adjacent blades and between two adjacent reinforcing ribs which provide more effectively channeling of condensate outward. Therefore, a ventilation unit 1 can be protected against infiltration by water to safeguard electric motor 4 against damage.

In the Advisory Action the Examiner stated that new claim 8 presented in the amendment filed on January 24, 2006 raised new issues that would require further consideration or search.

However, Applicant respectfully submits that new claim 8 presented in that amendment included features already examined. For example, the feature of through windows formed in the annular wall was presented in original claim 7. Further, the feature of through windows each placed in the gap between two adjacent blades was presented in original claim 5.

In order to expedite prosecution of this application, Applicant presents the foregoing amendment which includes new claim 8.

With respect to new claim 8, Boeckel and French fail to disclose a number of through windows formed in the annular wall close to the peripheral edges of the base wall and the annular wall, each placed in the gap between two adjacent blades and between two adjacent reinforcing ribs.

Applicant No.: 10/766,520
Art Unit: 3745
Response to Office Actions
mailed October 25, 2005 and
February 9, 2006
Attorney Docket No.: 26218

In other words, Boeckel presents a plurality of circumferentially spaced apart openings 26 placed adjacent the perimeter of end wall 13 (similar to the annular wall of claim 8), but placed in the central hub 12 (similar to the base wall of claim 8). See column 2, lines 32 - 45. This configuration does not allow to channel out any condensate formed inside the central body, without interfering with the blades.

The solution disclosed by Boeckel shows openings 26 on the base wall which cooperate with other openings 40 and 42 formed in a disc of the motor support, opposite to the base wall and perpendicular to the rotor shaft, for drawing air from the downstream over the motor windings to the upstream end of the central body. Here the air is quickly removed under the action of the main air stream. The aim of the fan disclosed by Boeckel is simply cooling the fan motor.

Further, regarding French, air holes 13 are provided through saucer like part 10 (similar to the base wall of claim 8), and the base of the boss 16 has slots 18 to receive the root part of blades 12. See lines 78 - 95. This configuration also does not allow to channel out any condensate formed inside the central body, without interfering with the blades.

The solution disclosed by French shows for preventing a user's hair from being drawn in through the air intake and becoming wrapped around the sleeve. It appears that the air holes 13 on the base wall do nothing towards channeling out condensate formed inside the boss (central body 16).

Applicant No.: 10/766,520
Art Unit: 3745
Response to Office Actions
mailed October 25, 2005 and
February 9, 2006
Attorney Docket No.: 26218

Therefore, each and every feature of new independent claim 8, namely, "a number of through windows are formed in the annular wall, close to the peripheral edges of the base wall and the annular wall, each placed in the gap between two adjacent blades and between two adjacent reinforcing ribs to channel out any condensate formed inside said central body" is not disclosed by either Boeckel and French.

Applicant also submits that each and every feature of new independent claim 8 is not disclosed in previously cited document US Patent No. 4,583,911 to Braun.

Braun discloses an edge 24 (similar to annular wall of claim 8) of the hub 16 to which blades 18 are mounted and containing a plurality of edge orifices 26. Edge orifices communicate with face orifices 22 located in face 20 of the hub 16. See column 3, lines 4 - 34. This configuration does not allow to channel out any condensate formed inside the central body, without interfering with the blades.

The configuration in Braun creates a multiple fluid pathway through the central body (named *hub fluid flow 38* by Braun) which, combined with the axial fluid flow conventionally produced by the blades, provides an increased flow to the energy converter. This added axial flow increases the performance of the electric motor.

The orifices in Braun may be formed in edge 24, but they are not close to the peripheral edges of the base wall and the annular wall, nor are they each placed in the gap between two adjacent blades and between two

Applicant No.: 10/766,520
Art Unit: 3745
Response to Office Actions
mailed October 25, 2005 and
February 9, 2006
Attorney Docket No.: 26218

adjacent reinforcing ribs to channel out any condensate formed inside said central body.

Applicant underlines that independent claim 8 is patentable over Braun since the reference fails to disclose each and every feature of new independent claim 8, namely, "a number of through windows are formed in the annular wall, close to the peripheral edges of the base wall and the annular wall, each placed in the gap between two adjacent blades and between two adjacent reinforcing ribs to channel out any condensate formed inside said central body."

Indeed, the technical problem faced and solved by the present application is channeling out, by centrifugal force, the condensate which is formed inside the central body. For this reason it is necessary to provide the central body only with through windows placed in the annular wall and in a position close to the peripheral edges of the annular and base walls, in other words, on the corner of the central body, so to facilitate a more effectively outwards channeling of the condensate.

An important feature is also to have through windows spaced in the gap between two adjacent blades and between two adjacent reinforcing ribs, so the condensate does not go on the blades and interfere with them.

It is to be noted that it is counter-productive to have windows placed on the base wall as shown in Boeckel and French.

If the ventilation unit is installed outside the vehicle, it is protected against infiltration by rainwater if the through windows are formed in the

Applicant No.: 10/766,520
Art Unit: 3745
Response to Office Actions
mailed October 25, 2005 and
February 9, 2006
Attorney Docket No.: 26218

annular wall instead. Thus, the electric motor is safeguarded against damage by water, so increasing the working life of electric motor itself, as discussed on page 4 lines 8 - 12 of the specification of the present application.

Applicant respectfully underlines that both the problem faced by Boeckel and the problems faced by Braun and French are quite different from the one solved by the present application.

Applicant further asserts that any combination of the two different inventions of Boeckel and Braun could not lead to the solution claimed by the present claim 8. In fact, the result would be a fan with through windows in both the base wall and the annular wall.

However, the fan would not function as in the present invention. In fact the through windows placed in a location other than close to the peripheral edges of both the base and annular walls, from which the condensate should be channeled out, as recited in new claim 8, would result in condensate forming on the blades. In this way the condensate would spread over the surface of each blade, interfering with their functioning.

Applicant submits that through windows placed on both the base wall and on the annular wall are not useful to the aim of the present invention.

Moreover, the windows placed on the annular wall, far from the peripheral edges of both the base wall and the annular wall, as shown in Braun, would not adequately protect the blades from the condensate. In fact, if the condensate was channeled from these lateral windows, it could spread also over the blades, interfering with them.

Applicant No.: 10/766,520
Art Unit: 3745
Response to Office Actions
mailed October 25, 2005 and
February 9, 2006
Attorney Docket No.: 26218

Further, in French, a non-analogous art, there is no suggestion to create through windows near the peripheral edges of both the base and annular walls, to channel out the condensate formed inside the central body.

Also the combination of French with either Boeckel or Braun would not result in new claim 8 of the present invention.

Moreover, claim 4, and new claims 9 and 10 (reciting features regarding the spacing of the blades and the reinforcing ribs, respectively) which are dependent on claim 8, are also believed to be allowable for at least similar reasons.

Therefore, in view of the foregoing, reconsideration and withdrawal of the rejections under 35 U.S.C. 102(b) is respectfully requested.

Conclusion

In light of the foregoing, Applicant submits that the application is now in condition for allowance. If the Examiner believes the application is not in condition for allowance, Applicant respectfully requests that the Examiner contact the undersigned attorney if it is believed that such contact will expedite the prosecution of the application.

Applicant No.: 10/766,520
Art Unit: 3745
Response to Office Actions
mailed October 25, 2005 and
February 9, 2006
Attorney Docket No.: 26218

In the event this paper is not timely filed, Applicant petitions for an appropriate extension of time. Please charge any fee deficiency or credit any overpayment to Deposit Account No. 14-0112.

Respectfully submitted,
NATH & ASSOCIATES PLLC

Date: April 6, 2006 By:

NATH & ASSOCIATES PLLC
112 South West Street
Alexandria, VA 22314
Tel. (703) 548-6284
Fax. (703) 683-8396


Gary M. Nath
Registration No. 26,965
Gregory B. Kang
Registration No. 45,273
Teresa M. Arroyo
Registration No. 50,015
Customer No. 20529